



Arkansas Science & Technology Authority



1st & 2nd Quarter Report 2005

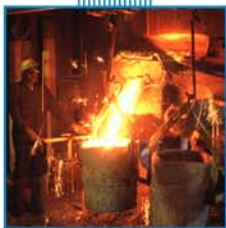


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Introductions:

In the last two quarters, the Authority Board and Staff have continued to bring the benefits of science and technology to people and state of Arkansas by satisfying our performance standards, meeting and surpassing our objectives, and welcoming some valued new faces to our family.



(Top left to right) VP Research, Dr. Gail McClure and Junior staff interns: Kathleen Velek, Patty Trantham & Dustin Hartung.

(Middle left to right) Authority Board Member, Robert Hall and Executive Secretary, Danielle Morris

(Bottom left) Authority Board Member, Johnny Hooks

Meeting Measures in Research

The Authority has set high performance measures and objectives that it aspires to meet, one of which is to make university scientist, technologist, and engineers more nationally competitive for federal research funds. The Authority follows through by continually supporting entities like Arkansas Biosciences Institute, the Experimental Program to Stimulate Competitive Research (EPSCoR), Arkansas Manufacturing Solutions (AMS), and the Arkansas Department of Economic Development (ADED) who it collaborated with in the creation of an R&D tax credit program.

The Authority also supports larger-scale research projects and research infrastructure investments. Authority staff serve on the UALR College of Science and Mathematics advisory board to determine instrumentation needs, and Authority staff members have met with researchers at the University of Arkansas (UA) campus to discuss research funding for nanoscience projects.



On Nov. 7, 2004, the Authority co-hosted the Welcome Reception for the 42nd Annual Briefing of the Council for the Advancement of Science Writing (CASW).

The Authority also supports strategic research and research infrastructure projects that are relevant to the state's economic growth. Authority staff have attended an Acxiom Tresnet meeting and Steering Committee meeting for the Acxiom Laboratory for Applied Research (ALAR), set up meetings and worked with University & National Center for Toxicological Research (NCTR) researchers to develop second round research focus for EPSCoR, and served on the University of Arkansas at Little Rock (UALR) College of Science and Mathematics advisory board to determine instrumentation needs. Authority staff have also worked with Tyson Foods, Safety and Laboratory Services, and Nanomaterials and Nanofabrication Laboratories on a R&D plan for submission for the aforementioned ADED tax credit program.



On Friday September 17th 2004, the Arkansas Science & Technology Authority Board of Directors & Authority Staff toured The Arkansas State University Bioscience Institute on the ASU campus in Jonesboro.

To increase the number of faculty in research, Authority staff served on an advisory board of the UAPB STEM project, and attended meetings to evaluate the progress of the program.

The Authority also increases shared projects among institutions by serving on the NASA Space Grant Consortium, which meets monthly, in addition to its afore mentioned NCTR/ EPSCoR work and nanoscience project development, which also helps increase federal research investments at federal facilities in Arkansas.

To increase the relationships between higher education and business development, the Authority worked with ADED in the R&D tax credit program by visiting and working with companies, conducting in-house research, and by helping develop guidelines for R&D forms and tax credit certificates.

The Authority also endeavors to improve science, technology, engineering, and mathematics education by seeking outside support. A good example is the Winthrop Rockefeller Foundation (WRF) who it has worked with to insure a smooth transition of the mini-grants program to Arkansas Community Foundation (ARCF) by developing an instruction manual and revising application forms, guidelines and evaluation matrix for use by ARCF affiliates. The Authority also, helped organize and conduct a workshop for the WRF mini-grants program to develop defining characteristics and revise guidelines for future use.



On December 10th and 11th a workshop was held at the Best Western Governor's Suite in Little Rock to educate instructors on how the program can help them enhance the potential of their classrooms.

The STUART Grant Program has provided funds to Arkansas public middle school teachers to use technology for science instruction. The Mini-grant Program has provided funds to Arkansas public middle school teachers to purchase consumable items for student hands-on experiences in science.

The Authority's STUART Grant Program provides a \$5,100 award to Arkansas teachers in grades five, six, seven, and eight to purchase a classroom participation system, a projector and a laptop computer.

The Authority's Mini-grant Program provides a \$500 award to Arkansas teachers in grades five, six, seven, and eight to purchase consumable science materials.

Explore the Authority's Mini-grant & STUART Grant opportunities.....



"The Mini-grant enabled my students to experience what science is all about-discovery."

Melissa Estes, College Hill Middle School
Texarkana, Arkansas

In the last 2 quarters a total of 10 STUART Grants were awarded, and 91 Mini-grants were awarded to 57 schools.

The Authority's President, or designee, serves on the Arkansas School for Mathematics Sciences & the Arts (ASMSA) Board of Visitors, which meets every two months, and also attends two yearly weekend planning retreats to improve science, technology, engineering, and mathematics education.



The Authority helps increase teacher education and preparation in higher education by helping initiate the organization of the Arkansas Mathematics, Science and Technology Coalition and planning and orchestrating the initial meeting co-hosted by Acxiom to address K-12 instructional needs.



The Authority also serves on the Taskforce for Technology in Education, and planned and initiated a two-day STUART workshop retreat for expanded e-Instruction training for science teachers receiving awards.



The Authority supports Small Business Innovation Research (SBIR) in new enterprises and the leveraging of Phase 1 and 2 SBIR awards with all relevant programmatic activities of the Authority. Authority staff accomplished this by visiting with nanotechnology startup companies who submitted SBIR proposals, and writing letters of support on three proposal submissions for Nanomaterials and Nanofabrication Laboratories. Visiting and working with Tyson Foods, and Nanofabrication Laboratories on the ADED R&D tax credit program satisfied the same measure and fulfilled another measure to continually support the Arkansas Department of Economic Development's use of R&D Tax Credits.

Meeting Measures in Commercialization:

Commercialization is a goal designed to direct the development of new products and firms. Authority staff continually fulfill this measure by serving on the UAMS patent & copyright committee which meets twice a month to review intellectual property from UAMS research, by serving on the UALR Incubator Advisory Committee which is reviewing the wisdom of UALR investing in an incubator for university research commercialization, and by meeting with various companies interested in state incentives. Plus, Authority staff have met with various Venture Capital funds interested in Arkansas. The Authority has also represented the state at the SSTI annual meeting, and hosted sessions on technology based economic development and private equity capital formation. The Authority staff nurtures the relationships between higher education and business development, by meeting with clients and introducing them to other university partners.

To increase the knowledge worker jobs through entrepreneurship and new company formation, Authority staff participate in Accelerate Arkansas meetings, serve as staff for that organization, assist with the CAEDA report, plan for the Arkansas Venture Capital Forum, and participate in Techpreneur by speaking at events and helping organize meetings. Authority Staff have also attended meetings of the state team for the National Governor's Association (NGA) Pathways to Prosperity Project and provided input to the Arkansas Employment Security Department regarding high growth careers.



The House & Senate Interim Committees on Agriculture, Forestry & Economic Development met Wednesday, August 25, 2004. Authority President, Dr. John Ahlen introduced a presentation on Model Entrepreneurship Programs. Read more at <http://asta.ar.gov/>

The Authority has also sought outside support to promote entrepreneurship by pursuing a Kellogg Foundation Grant opportunity in conjunction with the Small Business Development Center (SBDC) and Arkansas Capital Corporation. The Authority assisted with the Don Reynolds Governors Cup by arranging judges and visiting with representatives from Oklahoma and Nevada concerning the Reynolds grant, thus satisfying the Commercialization Strategy Measure.

To support ADED's use of R&D Tax Credits, the Authority has participated in ADED client meetings and works on applications for R&D tax credits involving companies such as Ventria, Green Technologies, and Space Photonics. The Authority also supported the Commerce Capital Development Corporation's (CCDC) use of investment tax credits, by attending meetings and assisting with interactions among the state entities.

The Technology Transfer Assistance Grant Program (TTAG) assists Arkansas' enterprises in developing or improving products or processes through the transfer of technical solutions to technology-based, industry-driven problems, thus enhancing that enterprise's market competitiveness. The Authority provides limited financial support for the transfer and deployment of innovative technology. The Authority will fund up to \$3,750 of costs associated with transferring new or existing technology from a qualified applicant -- such as a public or private enterprise, laboratory, college or university -- to an enterprise based in Arkansas. Up to \$5,000 of total project costs will be considered, with the first \$2,500 funded by the Authority; the remaining \$2,500 is cost-shared equally (50:50) between the Authority and the enterprise. Each enterprise is eligible to receive assistance for two technology transfer projects per year. Projects are evaluated on a competitive basis.

Industry Type	
All Other Professional, Scientific, and Technical Services	1
Analytical Laboratory Instrument Manufacturing	1
Analytical Laboratory Instrument Manufacturing	1
Analytical Laboratory Instrument Manufacturing	1
Drugs and Druggists' Sundries Merchant Wholesalers	1
Farm and Garden Machinery and Equipment Merchant Wholesalers	1
Gasoline Engine and Engine Parts Manufacturing	1
General Freight Trucking, Long-Distance, Less Than Truckload	1
Hand and Edge Tool Manufacturing	1
Human Resources and Executive Search Consulting Services	1
Industrial Launderers	1
Other Urban Transit Systems	1
Research and Development in the Physical, Engineering, and Life Sciences	1
Total	13

Ticket Sage Consultant Praises Authority TTAG program...



Steven Weintz was awarded a TTAG grant for his business SBW Ventures, which enabled him to work as a consultant for TicketSage, a box office systems manager. According to Stephen Cassar, president and CEO of that corporation, Steve Weintz was "instrumental in the success of Ticket Sage, Inc." and Mr. Weintz credited the Authority's TTAG program for his success.

TTAG Service Area

Project Description	Count Of Project Description
Material Engineering	1
Product Development & Design	3
SBIR Assistance	7
Business Systems/Business Management	1
Quarterly/Inspection	5
Market Development	3

Client Profile

Average # of employees	106
Average Age of Corporation	13 Years
Average Year of Corporation Founded	1991
Most Active County	Washington
Average Authority Investment	\$3,354.00
Total Authority Investment	\$67,080.00
Average Client Investment	\$1,181.25
Total Client Investment	\$23,625.00

TTAG SBIR AWARD SUMMARY

Authorized Awards Total	Private Sector Total	Total Projects Funded
\$67,080.00	\$23,625.00	10

R&D Tax Credit Under Programs of the Authority

Arkansas Science & Technology Authority's Board of Directors approved an R & D Tax Credit Application for Green Technologies in FY05.

Awarded	Description
Green Technologies	Development of novel mobility assistive devices primarily Wheelchairs.

The Technology Development Program (TDP) provides assistance in the development and commercialization of new technology-based products and processes through innovative technology development projects. The Program may provide monies to qualified applicants if their proposed project possesses a well-defined and comprehensive project plan and promotes the purpose of the Authority. The maximum award is limited by law to \$50,000. Awards are considered investments with terms negotiated on a case-by-case basis with a maximum 5 percent royalty on net sales for a maximum period of 10 years. No investments were made in the last 2 quarters.

The Seed Capital Investment Program (SCIP) fosters the development of innovative technology-based businesses and projects that will stimulate economic growth and industrial competitiveness in Arkansas. The Program assists in the initial capitalization or expansion of Arkansas-based businesses undertaking projects that are science or technology based and have a commercial or job creation potential. Each dollar invested by SCIP is leveraged by three dollars in matching funds from other sources. SCIP is limited to working capital and does not finance fixed assets. No investments were made in the last 2 quarters.



Vision Technologies Inc., one of the Authority's previous Seed Capital clients, has won a \$2 million U.S. Navy contract renewal for 2005.

Meeting Measures in Industry

Arkansas Manufacturing Solutions (AMS) has continued to improve Arkansas' manufacturing and industrial competitiveness through the delivery of comprehensive technical and business assistance services.

Being an affiliate of the National Institute of Standards and Technology Manufacturing Extension Partnership (NIST MEP) AMS has strived to improve the quality, productivity and global competitiveness of Arkansas' small and medium-sized manufacturers by providing technical and business management assistance services. AMS' primary partners are the University of Arkansas, Fayetteville; Arkansas State University, Jonesboro; the University of Arkansas at Little Rock; Southern Arkansas University Tech; Winrock International; Arkansas Institute for Performance Excellence; and the Arkansas Department of Economic Development.

Eight field staff deliver services to manufacturers. Typical services include Lean Manufacturing, Quality Management Systems, Six Sigma, Environmental, Health and Safety Management Systems, and Information Technology and Strategic Business Solutions.

During the first two quarters of FY 2005, AMS staff assisted Arkansas manufacturing clients through high impact projects in the areas of Lean Manufacturing, Quality Improvement, ISO 9000 Registration, and Environmental, Health and Safety.

AMS staff completed 57 projects, which led to clients' business improvements including jobs created or retained. Assistance projects were carried out on-site with a specific company or conducted in open enrolment training, which were attended by multiple companies.

AMS is executing the AMS communication plan with the goal of being recognized as the place to go for manufacturers and industry groups. Active communication actions such as mass mailings and press releases led to the improved name recognition of AMS and increased the number of enterprises served. AMS has acquired staff, developed marketing materials and established delivery plans to offer new, high impact services including Strategic Business Solutions, Lean Six Sigma and Information Technology



AMS represented its services at the 2004 Arkansas Economic Developers Conference in Hot Springs.



For FY2005, the Board authorized funding in the amount of \$997,477 to support the director and eight field staff: three at the University of Arkansas, Fayetteville; three at the University of Arkansas at Little Rock; one at Arkansas State University; and one at Southern Arkansas University Tech. The Board also authorized \$25,250 for partner activities. On October 14, 2004, Arkansas Manufacturing Solutions received the 2004 Arkansas Institute for Performance Excellence Quality Commitment award. The following improvements were reported by clients during the NIST MEP Survey of AMS projects completed from October 2002-September 2003 with Arkansas companies:

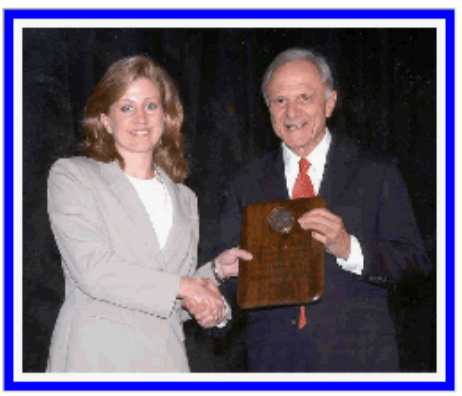
Increased or Retained Sales	\$31,618,000
Cost Savings	\$7,916,200
Company Investments	\$5,355,300
Jobs Created or Retained	548

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In FY 05 Q1 and Q2 (July-December 2004), AMS field staff completed 57 projects and served 112 companies.

Substance	Total
Business Systems/Business Management	3
CAD/CAM/CAE	0
EDI/ Communications/LAN	0
Environmental	20
General	8
Human Resources	1
Market Development	0
Process Improvement	20
Product Development	0
Quality Inspection	5
Total:	57

Naics Grp.	Industry Type	Total
311	Food Manufacturing	7
312	Beverage & Tobacco Product Manufacturing	2
313	Textile Mills	1
315	Apparel Manufacturing	2
316	Leather and Applied Product Manufacturing	3
321	Wood Product Manufacturing	8
322	Paper Manufacturing	6
323	Printing and Related Support Activities	2
324	Petroleum and Coal Products Manufacturing	2
325	Chemical Manufacturing	4
326	Plastic and Rubber Products Manufacturing	8
327	Nonmetallic Mineral Product Manufacturing	3
331	Primary Metal Manufacturing	5
332	Fabricated Metal Product Manufacturing	11
333	Machinery Manufacturing	10
334	Computer & Electronic Product Manufacturing	3
335	Electrical Equipment, Appliance & Component Mfg.	9
336	Transportation Equipment	10
337	Furniture and Related Product Manufacturing	5
339	Miscellaneous Manufacturing	1
	Other	11
Total		112



On October 14th, 2004, Lydia Carson, Director of AMS and Vice President Industry at the Arkansas Science & Technology Authority accepted the 2004 Arkansas Institute for Performance Excellence Commitment Award, on behalf of AMS.

Funding Received	
NIST Funding	\$ 428,217.96
Client Fees	\$ 187,603.67
State Funding	\$ 124,344.42
Total	\$ 740,166.05

General Operations			Actual				
	Character	Budget	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Total
	Regular Salaries	521,124	124,347.91	133,674.24			258,022
	Extra Help	12,000	2,448.00	0.00	0.00		2,448
	Maintenance and Operations	144,204	37,696.24	24,190.63			61,887
	Fringe Benefits	138,654	36,561.84	31,704.04			68,266
	Research	0					0
	(Reallocation)	0					0
	Conference Fees and Training	27,223	230.36	5,084.34			5,315
	Professional Fees	16,800		185.72			186
	Capital Outlay	0					0
	Marketing and Redistribution	0					0
	Technology Development	154,352	27,475.00	32,500.00			59,975
	TOTAL	1,014,357	228,759.35	227,338.97	0.00	0.00	456,098

Network Support			Actual				
	Character	Budget	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Total
	Act 1291 of 2003	257,182	0.00	124,344.42			124,344

Seed Capital Fund			Actual				
	Character	Budget	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Total
	Seed Capital Investments	1,900,000	0.00	50,000.00	0.00		50,000
	Seed Capital Fund Balance	1,737,302					

Network Operations			Actual				
	Character	Budget	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Total
	Regular Salaries	129,756	34,084.68	34,182.99			68,268
	Maintenance and Operations	124,456	19,397.78	22,985.59			42,383
	Fringe Benefits	34,396	9,747.51	8,085.88			17,833
	Grants	200,000	15,019.50	12,792.00			27,812
	Conference Fees and Training	37,928	2,987.29	5,480.38			8,468
	Professional Fees	50,000		3,000.00			3,000
	Capital Outlay	0			0.00	0	0
	Field Services	997,477	265,227	88,561			353,788
	Miscellaneous Fees	0					0
	TOTAL	1,574,013	346,463.69	175,087.98	0.00	0.00	521,552

Grants Received		Ann'l Budget	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Total
	WRF Middle School Science Year 2 of 3 Total award \$405,000	135,000	32,500.00	66,189.53			98,690
	WRF Entrepreneurial Arka Year 1 of 3 Total award \$443,750	381,473	412.08	25,515.70			25,928
	WRF Transition of Middle School Science to AR Community Foundation Year 1 of 2 Total award \$49,830	29,507		3,521.75			3,522

Current Board of Directors

John White, Ph.D. - Chair Chancellor University of Arkansas, Fayetteville Term Expires 2006	Neil Rutger, Ph.D. – Vice Chair Director and Supervisory Research Geneticist Dale Bumpers National Rice Research Center USDA Agricultural Research Service Term Expires 2005 <u>Authority Research Committee Chair</u>
Sue McGowan - Secretary Director of Economic Development/CEO Paragould /Greene County Chamber of Commerce Term Expires 2008 <u>Authority Investment Committee Chair</u>	Merlin Augustine, Ed.D. Financial Systems Coordinator University of Arkansas, Fayetteville Term Expires 2005
Johnny Hooks Agency Field Executive State Farm Insurance Term Expires 2008	David Eberdt Private Sector Term Expires 2007
Harry Ward, M.D. <u>Biography (pdf)</u> Professor of Medicine and Retired Chancellor University of Arkansas for Medical Sciences - Little Rock Term Expires 2006	Bum Lee Account Director Fidelity Information Services Term Expires 2007
D.W. May <u>Biography (pdf)</u> May and Associates Term Expires 2006	Rickey Williams President & Chief Executive Officer Rickey Williams & Associates, Inc. Term Expires 2007
Steve Floyd Arkansas Department of Higher Education Little Rock Term Permanent	Robert Hall President Hall Manufacturing Term Expires 2008
Gordon Knetzer Nabholtz Construction Term Expires 2007	Gary Phillips Term Expires 2009



On Friday September 17th 2004,
the Arkansas Science &
Technology
Board of Directors met on the
ASU campus.

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Authority Staff members attended the
Sept. 17th ASU Board Meeting and Tour....

(From left to right) James Watkins, Dustin Hartung, Leslie Lane,
Gail McClure, Cathy Ma, Chuck Myers, Patty Trantham, and
Melissa Adams.



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